

Time vs. space

# Time-slice

A lot of names have been used for the effect of moving a camera through a single point in time.

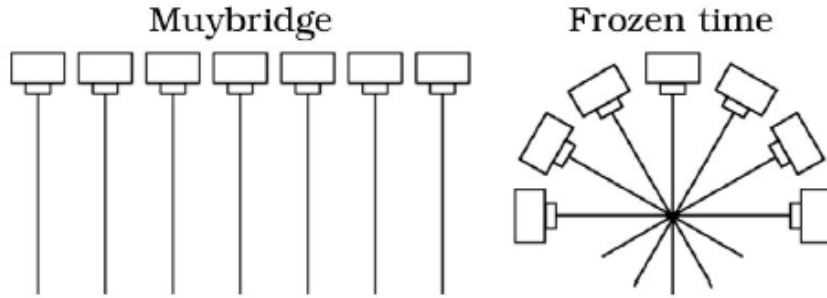
Time-slice photography

Bullet time

Frozen moment

Possibly the first example of is seen in a leader sequence for 'Speed Racer' (1967)

<http://www.youtube.com/watch?v=ALzDcMDhf2o>



# History

Although there are obvious relationships with Muybridge and others, UK photographer Tim Macmillan was probably the first to develop the ring of still cameras as a creative device.

<http://www.youtube.com/watch?v=ocLJWCnMhTo>

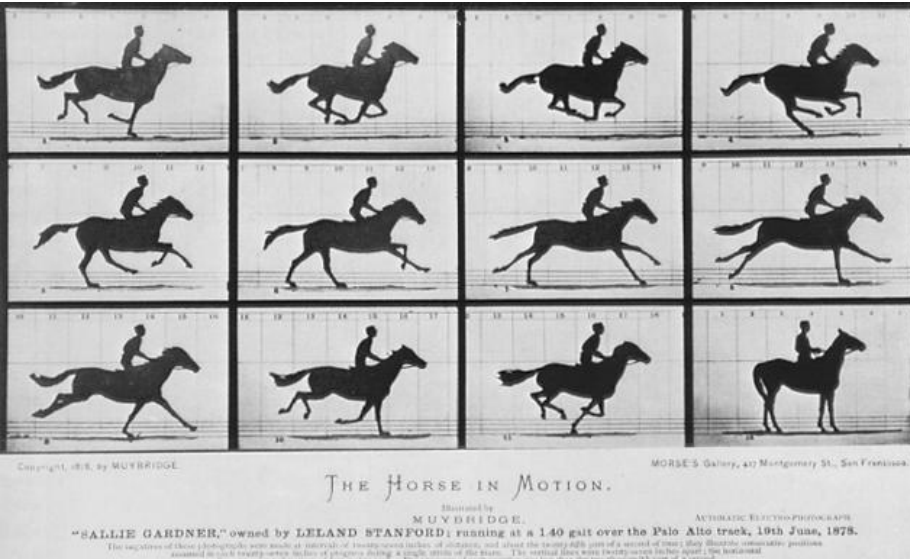
And used it in this 1985 music video:

<http://www.youtube.com/watch?v=rp9AD29LfRQ>

Michel Gondry has also pushed the technique to higher levels in music videos and commercials.

Smirnoff (1996)

<http://www.youtube.com/watch?v=1vj4jppqwkW>





# Bullet time

The the release of The Matrix (1999) the technique became know to the general audience.

<https://www.youtube.com/watch?v=Kjcv-JtUOgA>

At the same time it was used in Wing Commander (1999)

[http://www.youtube.com/watch?v=mAxG4u\\_rqug](http://www.youtube.com/watch?v=mAxG4u_rqug)

Michiel van Bakel: Equestrian (2003)

<http://www.michielfanbakel.nl/2003/01/equestrian-2003/>

Orange commercials (Chris Cunningham)

[http://www.youtube.com/watch?v=\\_nOzL8vF4\\_M](http://www.youtube.com/watch?v=_nOzL8vF4_M)



## **Mirage Boardshort**

[www.youtube.com/watch?v=lyDVmIDv\\_4c](https://www.youtube.com/watch?v=lyDVmIDv_4c)

# Fake bullet time

There are other ways of achieving the same look.

One is very traditional:

<https://www.youtube.com/watch?v=C5yhxqkJiAQ>

The other is in essence recreating the scene digitally.

<http://onesize.com/projects/playgrounds-'09-main-titles/>

<http://www.youtube.com/watch?v=THPoGxAol3s&feature=relmfu>

<http://www.youtube.com/watch?v=kdbpCc3OLgA>

# Other resources

<http://www.digitalair.com/techniques/>





# Games

Since The Matrix the effect has also been incorporated into video games such as Max Paine – where it allows for the user to slow down time.

<http://www.youtube.com/watch?v=WhxbYTMNMxo>

# Kung Pow

<https://www.youtube.com/watch?v=LxXjsQbCZR8>